Writing Up A Proposal
(Quantitative Research)

Doctoral Training Series, March 2010

General Guideline

- PhD proposal: 25,000 – 30,000 words

- Comprises:

  - Chapter 1: background of the study, problem statement, RQs, ROs, scope of the study, significance of the study

  - Chapter 2: Literature Review

  - Chapter 3: Research framework, hypotheses development, measurement of variables, sampling, data collection, instrumentation…

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Why proposals are rejected?

1. The proposal does not make a <u>sufficiently</u> large contribution to the 'body of knowledge'

2. The conceptual framework is not well developed (lack of underpinning theory/ies)

3. Lack compelling theoretical motivation for stated hypotheses

4. The writing style is disorganized, the proposal is not structured properly, missing references (+ no style, APA or what?)

5. Too many grammatical errors…English is my 2nd language…what a great excuse!!!

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Chapter 1

Comprises:

- Background of Study
- Problem Statement
- Research Questions
- Research Objectives
- Scope of the Study
- Significance of the Study.

Chapter 1: Background of Study

- Background of Study/Introduction/Research Problem is the hardest part to write…

- …an executive summary that gives the reader an enticing glimpse of the overall research theme and explaining/discussing 'what has been done?' 'what has been known/understood?' and 'what need to be done?'…why the study is so important or why is it worth a PhD study…

- …must "sell" the study…grab the reader's attention by stimulating attention, interest and desire to the topic…your goal is to infect the mind of your reader with your idea.

How to Write Background of Study?

1. Start with a broad theme or topic of the study

2. Then explain the practical and/or academic importance of the topic

   – Point out to the importance of the topic for practitioners by, for example, referring to specific management question/problem or by quoting appropriate industry statistics to illustrate its importance; OR

   – Refer to lack of previous academic research on the topic by highlighting important gaps, inconsistencies and/or controversies in the academic literature

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Example…practical & academic importance

- [practical importance] Over $100 billion is spent per year in the USA alone on gifts (Ruth et al., 1999), making understanding gift-giving behavior an important issue for many retailers and brand managers. [academic importance] While research has been conducted on the value of gift purchased (e.g. Belk, 1979; Garner and Wagner, 1991), for whom gifts are purchased (e.g. Heeler et al., 1978; Otners et al., 1993; Sherry et al., 1993), and why gifts are purchased (e.g. Andrus et al., 1986; Belk, 1979; Komter, 1996), little attention has been given to the reasons why gifts are chosen and, more particularly, the use of brand associations for a gift.

  [source: adapted from Parsons (2002: 237)

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Background of Study…Cont

3. Next explain 'what has been done?' – support your discussions by citing (synthesizing) the most important previous studies that are relevant to the current research (details and other relevant studies are discussed in chapter 2: Literature Review)

4. Then discuss 'what has been found/understood?' e.g. list of variables commonly found and therefore accepted by most to be significant/insignificant influence factors

Background of Study…Cont

5. Next indicates the important gaps, inconsistencies and/or controversies found in the literature (e.g. different context, contradictory findings, measurement issue, design issue etc.)…or may be there are new variables that have been conceptually identified but yet to be empirically tested ➔ your job is to justify 'what need to be done?' (GAP)

6. Normal length of background of study is between 5-10 pages.

Example

- Previous research has addressed several aspects of [topic]: (1) _____ (cite two or more relevant articles), (2) _____ (cite two or more relevant articles), and (3) _____ (cite two or more relevant articles).

- However, in addition, ...encompasses several unexplored dimensions that lately have attracted research attention in other disciplines (cite 2 or more relevant articles). Some of these unexplored ....appear to be important and worthy of investigation in the context of ...... An investigation of these issues is important because .... Furthermore, previous empirical research has focused primarily on .... Very little research has been done on................

- [source: Summer, 2001: 410)

Chapter 1: Problem 'Statement'

- Often confused with background of the study or research problem…

- To me the keyword is 'statement'….

- Therefore, PS should be stated either in the form of a concise problem statement OR in the form of a core research question, NOT a lengthy discussions of another 3 or 5 pages (though normally accepted by most examiners).

Problem Statement…Examples

- Based on the previous discussions…

- The main purpose of this study was to investigate the factors that influence the alignment between AIS requirements and AIS capacity and the impact of AIS alignment on the performance of SMEs OR

- The core research question that guided this study can be stated as follows:

- This study is attempted to answer the following core research question:

  – "what are the factors that influence the alignment between AIS requirements and AIS capacity and the impact of AIS alignment on the performance of SMEs?

- PS/core RQ can be followed by more specific questions.

Chapter 1: Research Questions

- Based on the potential factors identified from previous studies which are deemed important in the specific context of your study, you may also provide specific research questions

- Examples:
  - What is the relationship between B and A among….?
  - What is the relationship between C and A among…..?
  - What is the relationship between D and A among…..?
  - What is the factor that most influence A among…..?
  - What is the impact of A on Y among….?

- RQs help formulate research objectives.

Chapter 1: Research Objectives

- Phrased in the form: "to determine...", "to investigate...", "to evaluate...", "to compare...".

- Should logically flow from the problem statement or core research question (...to me having stated clearly RQs is already sufficient without ROs)

- Examples:
  - To determine the relationship between B and A among....
  - To determine the relationship between C and A among....
  - To determine the relationship between D and A among....
  - To identify factor that most influence A among.....
  - To examine the impact of A on Y among.....

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Chapter 1: Significance of the Study

- Highlights the current study's **main contribution**

- Often start with a clear, but concise statement of the core research problem to be investigated and of the study's specific research objectives

- Then explain the academic (theoretical) and/or practical importance of the possible research findings…relate to the issues/problems discussed earlier.

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Example

- This study seeks to extend …………by addressing the gaps in …….. The study will investigate the impact of four ………..(1) ………, (2)………., (3) …………, and (4) ……… In addition, interrelationships among …………are examined. Findings from this study are hoped…..(theoretical)…..(practical)…..

Chapter 1: Scope of the Study

- Clearly state the <u>context</u> (e.g. industry, market, geographic area) in which the study will be conducted.

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Background of Study…additional tips

- Opening paragraph:

  - Write the opening paragraph in plain English without using technical jargon

  - Do not plunge the unprepared reader straight into the problem or theory

  - Use examples to illustrate unfamiliar constructs or technical terms.

Example

- Opening paragraph, compare these two sentences:
  - Festinger's theory of cognitive dissonance [unfamiliar term] received a great deal of attention during the latter part of the 20th century [wrong]
  - The individual who holds two beliefs that are inconsistent with one another may feel uncomfortable. For example, the person who knows that he or she enjoys smoking, but believes it to be unhealthy, may experience discomfort because of the inconsistency or disharmony between these two thoughts or cognitions. This feeling of discomfort was called cognitive dissonance by social psychologist Leon Festinger (1957), who suggested that individuals will be motivated to remove this dissonance in whatever way they can [better].

additional tips….. justify, justify, justify…..

- For a study of a specific country, you are required to explain or to strongly justify why readers should find 'Malaysian' results interesting…e.g. how Malaysia is different from Western countries and/or how Malaysia is different from other Asia/ASEAN countries? i.e. Why results from other countries cannot be applied in Malaysia? Culturally different? Different business orientation? Any supporting theory? Does knowing about Malaysia improve/add current understanding of a particular topic/issue?......no such study has been conducted in Malaysia is not a strong justification for a PhD research!!!

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Justify, justify, justify…..

- …if you to choose to study the issue of customer service, its influence factors and the impact on satisfaction among government agencies with a specific focus on a customs department at Malaysian border (e.g. Bukit Kayu Hitam), explain how government sector/agency is different from private sector/agency and/or how customs dept is different from other govt. agencies and/or how BKH is different from other customs departments…

Chapter 2: LR….

- How many articles should I read? Or When should I stop reading?

- I have searched 'everywhere' but found few relevant articles relating to the topic…issue of where/how to search

- I have read hundreds of articles but I can't find any gap or issue…issue of contribution to the knowledge

- What to look for in an article?

What is Contribution to the Knowledge?

▪ Different types of contribution/gap:

  – Conceptual contribution/gap

  – Empirical contribution/gap

  – Methodological contribution/gap.

Conceptual contribution/gap

- Improved conceptual definitions of the original constructs

- Identification and conceptual definition of additional construct(s) to be added to the conceptual framework (e.g. Additional dependent, independent, mediating/moderating variables)

- Development of additional theoretical linkages (i.e. Research hypotheses) with their accompanying rationale

- Development of improved theoretical rationale for existing linkages.

Empirical contribution/gap

- Testing a theoretical linkage between two constructs that has not been previously tested

- Examining the effects of a potential moderator variable on the nature of the relationship between two constructs

- Determining the degree to which a variable mediates the relationship between two constructs

- Investigating the psychometric properties of an important scale.

Methodological contribution/gap

- Reduce the potential problems with shared method variance through the insightful use of multiple methods of measurements

- Increase the generalizability of the research through more appropriate sampling procedures

- Enhance the construct validity of key measures through the use of refined multiple-item measures and/or use of measurement approaches that do not rely on self-reports.

Chapter 2: Literature Re+view (look again)

- To compile a good LR, you have to 'digest' the available literature from different sources and then provide a <u>critical evaluation</u> and <u>synthesized</u> summary of the current knowledge related to your topic

- <u>Remember LR is NOT merely a chronological summary of relevant literature</u>

- Must facilitate theory development, closes areas where a plethora of research exists, and uncovers areas where research is needed.

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LR... Specific challenges:

- Finding appropriate literature on a specific topic

- Presenting a <u>logical</u>, <u>synthesized</u> and <u>reader-friendly</u> review of the current knowledge relating to a specific topic.

Finding appropriate literature

1. Start with the leading journals

2. Go **backward** by reviewing the citations for the articles identified in step 1 to determine prior articles to consider

3. Go **forward** by using the Citation Index (e.g. Scopus Citation Index www.scopus.com) to identify articles citing the key articles identified in the previous steps.

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Notes by one reviewer of a leading academic journal

"Studies of the IS literature have consistently been limited by drawing from a small sample of journals. Even though the [ones] investigated here may have reputations as our top journals, that does not excuse an author from investigating "all" published articles in a field…I just can't see the justification for searching by journal instead of searching by topic across all relevant journals" (Webster & Watson, 2002, p. xviii).

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Tips…how should I go about to synthesize information?

a. Synthesizing definitions

b. Synthesizing lists of attributes, factors or criteria

c. Synthesizing opposing viewpoints on a specific issue.

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a. Synthesizing definitions

- What are the main communalities and differences between the existing definitions of a construct?

- Are there distinguishable "school of thought" on the topic? If so, what do they have in common and how do they differ?

- Have there been changes over time in the way in which a particular construct is defined?

b. Synthesizing lists of attributes, factors or criteria

- You can provide a comparative summary in table format to show which aspects in the different lists are the same and which aspects differ, or

- You can also try to group the individual attributes, factors, or criteria into higher-level dimensions to form groups of individual elements that together measure some underlying higher-level construct.

Example

Constructs	Description of constructs	Indicators	Literature sources
Response time	Time to get a response after a request or an interaction with a Web site	☐When I use the Web site there is very little waiting time between my actions and the response ☐The Web site loads quickly ☐The Web site takes long to load	Machlis, 1999; Seybold, 1998; Shand, 1999.

c. Synthesizing opposing viewpoints on a specific issue

- Different authors often have different points of view on the same issue

- Thus, it is important to clearly explain the nature of and differences between the opposing perspectives, and

- Where appropriate one should also indicate which specific perspective you support and motivate why.

How?

Concept centric	Author-centric
Concept X…[author A, author B, …]	Author A…[concept X, concept Y, …]
Concept Y…[author A, author C, …]	Author B…[concept X, concept W, …]

Caution…Daft (1985, p. 198)

- "…another indicator of amateurism was an overly negative approach to the previous literature…previous work is always vulnerable. Criticizing is easy, and of little value; it is more important to explain how research builds upon previous findings rather than to claim previous research is inadequate and incompetent".

How should I structure a LR…general guidelines

- "Funnel approach": start the review by placing the specific topic being discussed into an appropriate <u>broader context</u> and then focus your discussion on more specific issues

- Plan the headings and sub-headings that you will be using in order to ensure a logical flow of information

- Headings should be informative: tell the reader exactly what is covered in the section to follow

- Make sure that the information under each heading are, in fact, related to and reflected in the heading.

Chapter 3

- Research framework

- Hypotheses development

- Measurement of variables

- Method: sampling, data collection, instrumentation (optional).

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Chapter 3: Research/Theoretical Framework

- This section represents the theoretical core of a research work

- TF is a conceptual model of how one <u>theorizes</u> or makes logical sense of the relationships among the several factors that have been identified as important to the problem

- Theoretical discussions of normally 3 – 5 pages before a model is presented in a diagram form.

TF is often followed by.....

- 'Conceptual' definition of all the key concepts/constructs (variables) as presented in your research model

- Clearly point out if a construct (variable) is multi-dimensional and define each of its dimensions or components separately

- A focused and synthesized discussion of relevant previous research findings involving the constructs/concepts (variables) relevant to your study

- Clearly distinguish the construct from conceptually different, but closely related construct, if necessary

- Provide a summary of existing approaches to the measurement of the relevant constructs (variables)

- Remember to be consistent in using the constructs and terminology within and across the different sections of the proposal.

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Chapter 3: Hypotheses

- A theory-based expectation about some characteristics (relationship between two or more variables expressed in the form of a testable statement) of a target population that may or may not be true

- Each hypothesis statement must be supported by 'strong justifications' using appropriate theory, previous research findings or the results of exploratory research

- Hypotheses should be stated <u>directly after</u> the paragraph(s) that justify them.

Hypotheses...Cont

- Build a bridge to the hypothesis by using phrases such as:
    - "Based on the aforementioned discussion, we hypothesize that:"
    - "This leads to the following hypotheses:"
    - "We, therefore, hypothesize that:"
    - "It is, therefore, posited that:"
    - "The following hypothesis is thus stated:"
- State the null/alternative hypothesis.

Hypotheses...Cont

- Null
  - There is no relationship between A and B
- Alternate
  - There is a relationship between A and B (non-directional)
- Alternate
  - There is a positive (negative) relationship between A and B (directional)
- Null or alternate?

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Chapter 3: Method

- Describes the steps followed in the execution of the study and also provides a brief justification for the research methods used 'in your study'

- Sub-sections:

  - Sampling

  - Data collection

  - Instrumentation.

Sampling

1. Clearly define the <u>target population</u> of and <u>context</u> in which the study was conducted

2. Describe the sampling method in detail:

   - Specific <u>sampling method</u> to be used

   - <u>Sampling frame</u> to be used (if applicable)

   - How <u>sampling units</u> will be selected

   - <u>Target sample size</u> and <u>how this will be determined</u>, (later on) the <u>realized sample size</u> and <u>response rate</u>, and the <u>number of usable questionnaires</u> that were analyzed

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Data collection

1. Describe how you are going to <u>pre-test</u> and <u>pilot-test</u> the data collection instrument

2. Describe how the data will be collected, include:

    – <u>Data collection method</u> to use

    – <u>Data collection process</u> (how the data will be collected)

    – <u>Time period</u> during which the data will be collected.

Instrumentation (optional)

- Limit your description to the scales used to measure the <u>main</u> constructs/concepts (can simply list the demographic variables):

  - <u>Basic scale design</u> (e.g. Likert or semantic differential)

  - <u>Number of scale items and scale points</u>

  - <u>How scale points were labelled</u>

  - <u>Number of dimensions</u>* (in a multiple-item rating scale) and the <u>aspects</u> being measured by each dimension. Also the results of confirmatory factor analysis to confirm the expected dimensionality of a scale

  - Reference to the <u>literature source</u> from which the scale was taken or adapted (how it was <u>adapted</u>)

  - <u>How the total (summated) scores were calculated</u>

  - <u>Internal consistency reliability</u> (i.e. Cronbach's alpha) of in a multiple-item rating scale.

ADDITIONAL TIPS

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Title

- Should clearly reflect the main theme/issue discussed in the proposal
- Preferably answer the following questions:
  - What will be researched?
  - How the topic be researched?
  - With whom? – describes the research population and units of measurement
  - Where/in what context will the study be conducted?

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Title…structure.

- However:

  – Due to restrictions on length, it may not always possible to include all the 4 elements. In such cases, the last 2 elements – population and geographical area - are often omitted

  – The title should, however, still clearly indicate the main topic and, if possible, the research design of the study

- Example1: Information Technology and Performance: An empirical examination of the Mediating Effect of Management Accounting Systems

- Normally between 8 to 15 words.

Abstract

Good to provide an abstract for your proposal

1.   Start with a brief theme sentence to orientate the readers to the overall issue addressed in the proposal

2.   Indicate the main aim or purpose of the study

3.   Explain the importance of the study

4.   Briefly describe the methodology used/to be used

5.   Finally indicate the potential contribution to be made by the study in filling gaps in the literature ; potential practical or managerial implications.

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Example

- [Element 1] Most research concentrates on the direct impact of information technology (IT) on firm performance. Little research considers the indirect approach to measure the relationship. [Element 2 & 3] This research focuses on measuring the alignment of accounting information systems (AIS) requirements with AIS capacity and then investigating whether this AIS alignment is linked to firm performance. [Element 4] Data will be collected from Small and Medium Sized Enterprises (SMEs) in Malaysia was collected on nineteen accounting information characteristics by a questionnaire based survey. [Element 5] Findings from the study are hoped to provide evidence of the importance of AIS alignment and deepen current understanding of the requirements for accounting information and the use of IT as an important information processing mechanism, both in Malaysia and on a global basis.

Abstract....additional tips

- It is a summary of your proposal, thus nothing should be in it that it not also included in the main text

- Written in a single paragraph

- Should not contain any figures, tables or in-text references.

Keywords

Good also to provide keywords to your proposal (after the abstract)

- Should preferably reflect the:

  1. Discipline

  2. Sub-discipline

  3. Theme

  4. Research design, and

  5. Context (industry and/or country) of the study

- Example: [1] information systems, [2] accounting information systems, [3] alignment, [4] survey, [5] SMEs/Malaysia.

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Remember

- The title, keywords and abstract are written <u>after</u> you have completed the proposal.

Writing Style?

- Accessible to an intelligent layperson

- Avoid difficult and unfamiliar words

- Paraphrase and explain things in your own words, as far as possible (avoid too many direct quotations*)

- Careful not to repeat the same information or arguments in different paragraphs or sections of the article

- Providing overviews and building bridges (provide an overview of the contents to follow at the start of each major section, and end each major section off with a short summary)

- Keeping it short (e.g. sentences longer than three lines are often difficult to read and understand).

FINAL TIPS

- Actually there is no 'best' or 'right' guideline for proposal/thesis write-up

- Work hard (+ smart), be honest, be humble, be an expert in what you do or your area of research (originality issue), gain your supervisor's trust & confidence, follow his/her advice…insyaAllah you will be aright…

THANK YOU

and

GOOD LUCK…..

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